

(12) **UK Patent Application** (19) **GB** (11) **2 224 522** (13) **A**

(43) Date of A publication 09.05.1990

(21) Application No 8921240.1

(22) Date of filing 20.09.1989

(30) Priority data

(31) 8825705

(32) 03.11.1988

(33) GB

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(51) INT CL⁴

A47K 13/14 11/06

(52) UK CL (Edition J)

E1C C35G1

A4N N21 N22 N23

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(58) Field of search

UK CL (Edition J) A4N, E1C

INT CL⁴ A47K

(54) **Disposable liner for portable toilet**

(57) A disposable liner 1 for fitting to a toileting device or receptacle, such as a child's potty 2, contains liquid-absorbent material provided by a pad 8 of cellulose wadding, and is self-sealing after use. For sealing, a rim portion 5 of the liner 1 is coated with a contact adhesive covered by siliconised release strips 6 and 7 each spanning one-half of the rim portion 5. After use the liner 1 is sealed by stripping off the release strips 6 and 7 and pressing the two halves of the rim portion 5 together.

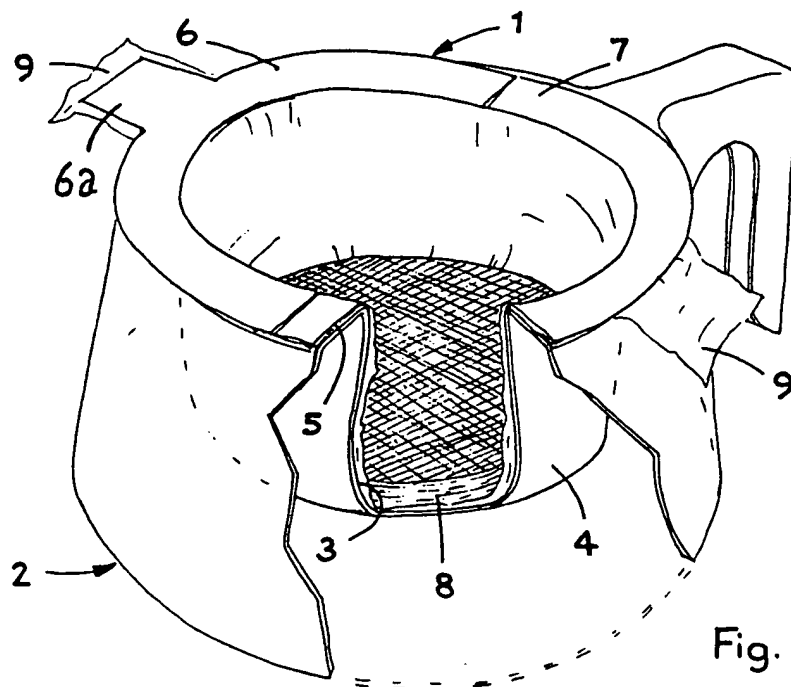


Fig. 1.

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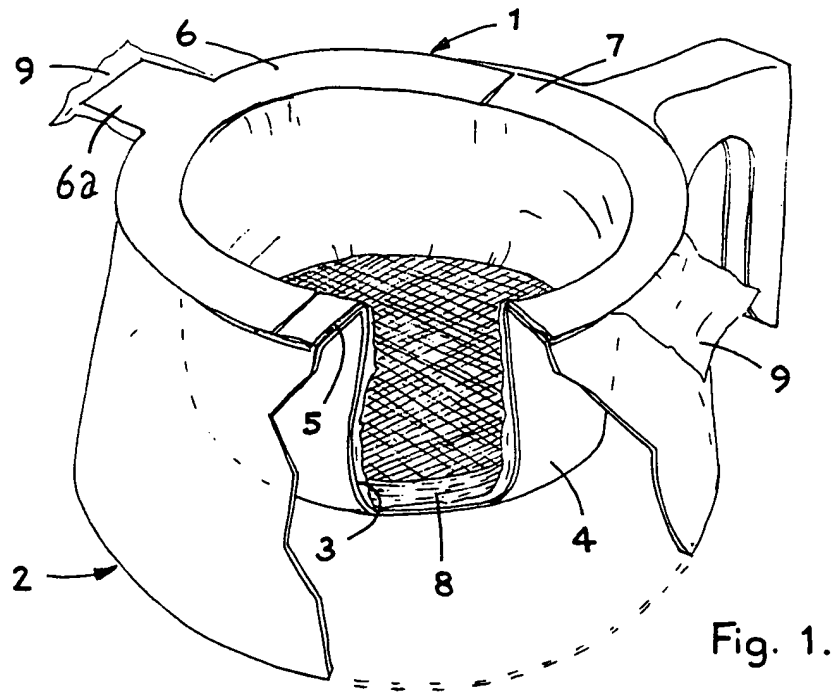


Fig. 1.

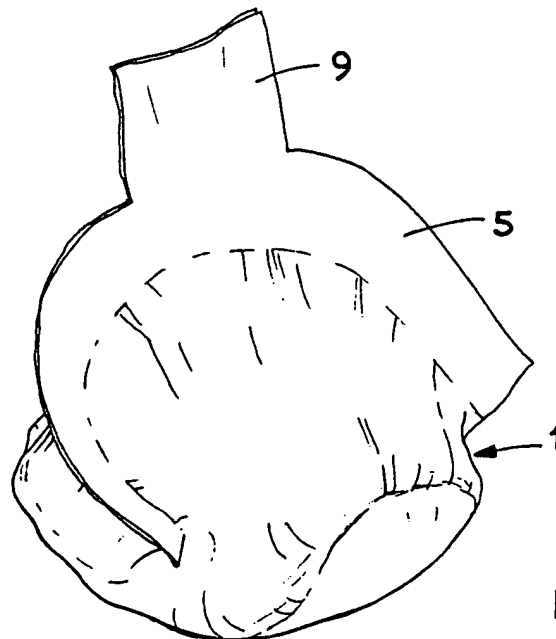


Fig. 2.

S49/P03/GB

"TOILETING MEANS"

This invention relates to toileting means and provides such means particularly, but by no means exclusively, suitable for use in the toileting of small children employing a child's chamber pot or "potty" as it is hereinafter referred to. Although described herein mainly with reference to such use the invention provides means which are of application throughout the toileting field generally, for example with bedpans, chamber pots and commode arrangements.

Travelling with a small child, particularly whilst it is being "potty" trained, presents toileting problems experienced by all parents. If a potty is used disposal of the contents is at best a nuisance, and thus it is common practice to revert to fitting a diaper or nappy even though this breaks the toilet training routine.

The invention provides means which can in particular be designed to ameliorate the toileting problems when travelling with a small child.

The invention provides means for toileting in the form of a disposable liner for a toileting device or receptacle, such as a child's potty, which liner comprises or contains liquid-absorbent material and can readily be sealed after use. The liner is preferably self-sealing,

and to this end may have mutually-adherent rim sections each spanning approximately half of the rim.

Preferably the liquid-absorbent material is provided by an absorbent pad adhered to the inner side of the liner and shaped generally to fit the bottom of the toilet receptacle when the liner is fitted therein. Sealing of the liner after use may be achieved by attaching double-sided adhesive tape to the liner, with the outer adhesive layer protected by release strips which are pulled off to expose the adhesive for sealing purposes prior to disposal of the liner. This tape may be attached to a rim portion of the liner, or alternatively a hot-melt contact adhesive may be applied to the rim and again protected by a release strip. Such an adhesive may be applied to only one-half of the rim.

The liner is preferably manufactured from thin plastics material which is impervious to moisture, a translucent white polythene-like material being suitable. Preferably it is bio-degradable. It is desirably a reasonably good fit within the receptacle with which it is to be used, and whilst it may be formed by any process such as used in the manufacture of plastics bags it is preferably vacuum formed to the required size and shape. This not only provides a good fit within the intended receptacle, but the vacuum forming can provide a thickened rim portion to which the contact adhesive is applied for sealing after use.

The invention will now be further described with reference to the accompanying drawings which illustrate, in sketch form and by way of example, a preferred embodiment of toileting means in accordance with the invention. In the drawings:

Fig. 1 is a perspective and partly cut-away view of a liner in accordance with the invention fitted to a child's potty; and

Fig. 2 is a perspective view of the liner, sealed after use and prior to disposal.

The drawings illustrate a disposable plastics liner 1 in accordance with the invention fitted to a moulded plastics potty 2 of conventional double-walled type. This type is shown by way of example and it will be appreciated that a liner of the invention can be used with a child's potty of any type, or indeed with any toileting receptacle, such as a bedpan or commode pan, if the liner is appropriately sized and shaped. The liner 1, which is preferably vacuum formed from a plastics material impervious to moisture, is a reasonably good fit within the toileting receptacle 3 formed within the inner wall 4 of the potty 2.

The liner 1 has a rim portion 5 which sits on the rim 6 of the potty 2, so that in use the child sits on the rim portion 5 to hold the liner 1 in fitted position. The two semi-circular halves of the rim portion 5 are coated with an adhesive so that their upper surfaces, in fitted

position, are adherent. One half of the rim portion 5 has the adhesive thereon covered by a siliconised release strip 6 with a free ear section 6a by which it can readily be gripped by the fingers and stripped off to uncover the adhesive below it. The adhesive on the other half of the rim portion 5 is covered by an adhered thick paper strip 7 which serves to rigidify the rim. A pad 8 of liquid-absorbent material is positioned within the liner, fitting and being secured by adhesive to the bottom thereof. The absorbent pad 8 may be of any suitable material or formation; it is conveniently of cellulose wadding and may be recycled paper wadding.

As shown in Fig. 1, the potty 2 with fitted liner 1 is ready for use. At the end of the toileting operation, the liner 1 with its contents is removed from the potty 2, and if desired a fresh liner can be fitted at this stage so that the potty 2 will be ready for its next use. After removal of the liner 1 it is sealed, by stripping off the release strip 6 and pressing together the mutually-adherent sections of the liner rim, provided by the uncovered adhesive and the paper strip 7, prior to disposal in a suitable manner. When sealed the liner 1, as shown in Fig. 2, forms a plastics bag containing the now-wet pad 8 and/or other contents, and the rim portion 5 has opposed ear sections 9 which in effect provide a carrying handle for the sealed bag.

Vacuum forming of the liner 1 has the advantage

that the rim portion 5 can be of thicker material and thus provide a more rigid rim useful not only for fitting the liner but also when the sealed liner is carried prior to disposal. With a sufficiently rigid rim portion such as can be achieved with vacuum forming of the liner, the paper strip 7 and the adhesive by which it is secured can be omitted so that only one half of the rim portion requires adhesive covered, prior to sealing, by the release strip 6. The plastics material used may be bio-degradable for environmental reasons. As an alternative to vacuum forming, the liner could for example be welded up from a blank of the plastics material.

CLAIMS:

1. Toileting means in the form of a disposable liner for a toileting device or receptacle, which liner comprises or contains liquid-absorbent material and can readily be sealed after use.
2. Toileting means according to claim 1, wherein the liner is self-sealing after use.
3. Toileting means according to claim 2, wherein the liner has mutually-adherent sections for sealing purposes.
4. Toileting means according to claim 3, wherein the liner has a rim with mutually-adherent sections each spanning approximately half of the rim.
5. Toileting means according to any one of the preceding claims, wherein the liquid-absorbent material is provided by an absorbent pad.
6. Toileting means according to claim 5, wherein the absorbent pad is adhered to the inner side of the liner.
7. Toileting means according to claim 5 or claim 6, wherein the absorbent pad is shaped to fit the bottom of the toilet receptacle with which the liner is to be used.

8. Toileting means according to claim 3 or claim 4, wherein for sealing of the liner after use double-sided adhesive tape is attached to the liner, with the outer adhesive layer of the tape protected by release strips which are stripped off to expose the adhesive for sealing purposes prior to disposal of the liner.

9. Toileting means according to claim 4, wherein for sealing of the liner after use a hot-melt adhesive is applied to only half of the rim and, prior to sealing of the liner, is covered by a release strip.

10. Toileting means according to any one of the preceding claims, wherein the liner is manufactured from thin plastics material which is impervious to moisture.

11. Toileting means according to claim 9, wherein the liner is manufactured from translucent white polythene material.

12. Toileting means according to any one of the preceding claims, wherein the liner is shaped and sized so as to be a reasonably good fit within the receptacle with which it is to be used.

13. Toileting means according to claim 12, wherein the liner is designed to fit a conventional child's potty.

14. Toileting means according to claim 11 or claim 12, wherein the liner is vacuum formed to the required size and shape.

15. Toileting means according to claim 13, wherein the vacuum forming of the liner provides a thickened rim portion.

16. Toileting means in the form of a disposable liner for a toileting receptacle, the liner being constructed and arranged substantially as herein particularly described with reference to the accompanying drawings.